

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),

at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'),

and at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30') and having an igniter (54) integrated within said igniter unit (16, 18),

said igniter unit (16, 18) being arranged radially and externally on said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10) and a, with respect to said outer housing (10), first radial ignition transfer opening (50) being provided in said outer housing (10), said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant (30; 30'), flowing via said first ignition transfer opening (50) into one of a distribution space (40) and an intermediate space (80) arranged outside of said igniter unit (16, 18) and into an interior of said outer housing (10), said one of a distribution space (40) and an intermediate space (80) being free of propellant and defined by an inner face of said outer housing (10) and a wall (32, 72).

Claim 2 (Previously Presented) The gas generator according to claim 1, wherein a second ignition transfer opening (58) is provided in said igniter unit (16) in a region of the fastening of said igniter unit (16) to said outer housing.

Claim 3 (Previously Presented) The gas generator according to claim 1, wherein said igniter unit (16, 18) does not project into said combustion chamber (26, 28).

Claim 4 (Withdrawn) The gas generator according to claim 1, wherein said combustion chamber (26, 28) has an axially arranged filling opening.

Claim 5 (Previously Presented) The gas generator according to claim 1, wherein said combustion chamber (26, 28) is constructed without an undercut.

Claim 6 (Previously Presented) The gas generator according to claim 1, wherein said combustion chamber (26, 28) is cylindrical and has a longitudinal direction running parallel to a central axis (A) of said outer housing (10).

Claim 7 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),

at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'),

and at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30') and having an igniter (54) integrated within said igniter unit (16,18),

said igniter unit (16, 18) being arranged radially and externally on said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10) and a, with respect to said outer housing (10), radial ignition transfer opening (50, 58) being provided in said outer housing (10), said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant (30; 30'), flowing via said ignition transfer opening (50, 58) into one of a distribution space (40) and an intermediate space (80) arranged outside of said igniter unit (16, 18) and into an interior of said outer housing (10),

wherein said combustion chamber is defined by a combustion chamber wall (32) and wherein between an inner face of said outer housing (10) and said combustion chamber wall (32) said distribution space (40) is provided for ignition gas produced by said igniter unit (16, 18), said ignition transfer opening (50, 58) opening into said distribution space (40).

Claim 8 (Previously Presented) The gas generator according to claim 7, wherein said distribution space (40) extends across an entire axial length of said combustion chamber (26).

Claim 9 (Previously Presented) The gas generator according to claim 8, wherein said outer housing (10) has outflow openings (44) and an expansion space (42) for gas is provided between said combustion chamber (26, 28) and said outflow openings (44).

Claim 10 (Previously Presented) The gas generator according to claim 9, wherein said expansion space (42) extends across said entire axial length of said combustion chamber (26, 28).

Claim 11 (Previously Presented) The gas generator according to claim 7, wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said distribution space (40).

Claim 12 (Previously Presented) The gas generator according to claim 9, wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said expansion space (42).

Claim 13 (Canceled)

Claim 14 (Previously Presented) The gas generator according to claim 12, wherein except for said distribution space (40) and said expansion space (42), said insert lies with an entire surface against said inner face of said outer housing (10).

Claim 15 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),  
at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'),  
and at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30') and having an igniter (54) integrated within said igniter unit (16,18),  
said igniter unit (16, 18) being arranged radially and externally on said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10) and a, with respect to said outer housing (10), first radial ignition transfer opening (50) being provided in said outer housing (10), said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant (30; 30'), flowing via said first ignition transfer opening (50) into one of a distribution space (40) and an intermediate space (80) arranged outside of said igniter unit (16, 18) and into an interior of said outer housing (10), said one of a distribution space (40) and an intermediate space (80) being defined by an inner face of said outer housing (10) and a wall (32, 72), wherein said outer housing has outflow openings (44) which are arranged in a region lying diametrically opposite said first ignition transfer opening (50) as seen relative to a central axis (A) of said outer housing (10).

Claim 16 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),  
at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'), and  
at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30'),  
said igniter unit (16, 18) being arranged laterally and externally on said outer housing (10) and, in relation to said outer housing (10), a radial ignition transfer opening (50, 58) being provided in said outer housing so that said ignition gas generated in said igniter unit (16, 18) flows into an interior of said outer housing (10) via said ignition transfer opening (50, 58), wherein said combustion chamber is defined by a combustion chamber wall (32) and wherein between an inner face of said outer housing (10) and said combustion chamber wall (32) a distribution space (40) is provided for ignition gas produced by said igniter unit (16,18), said ignition transfer opening (50,58) opening into said space (40), wherein said distribution space (40) extends across an entire axial length of said combustion chamber (26), wherein said outer housing (10) has outflow openings (44) and an expansion space (42) for gas is provided between said combustion chamber (26,28) and said outflow openings (44), wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said expansion space (42).

Claim 17 (Canceled)

Claim 18 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),

at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'), and

at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30'),

said igniter unit (16, 18) being arranged laterally and externally on said outer housing (10) and, in relation to said outer housing (10), a radial ignition transfer opening (50, 58) being provided in said outer housing so that said ignition gas generated in said igniter unit (16, 18) flows into an interior of said outer housing (10) via said ignition transfer openings (50, 58), wherein said combustion chamber is defined by a combustion chamber wall (32) and wherein between an inner face of said outer housing (10) and said combustion chamber wall (32) a distribution space (40) is provided for ignition gas produced by said igniter unit (16,18), said ignition transfer opening (50,58) opening into said distribution space (40), wherein said distribution space (40) extends across an entire axial length of said combustion chamber (26), wherein said outer housing (10) has outflow openings (44) and an expansion space (42) for gas is provided between said combustion chamber (26,28) and said outflow openings (44), wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said expansion space (42), wherein except for said distribution space (40) and said expansion

space (42), said insert lies with an entire surface against an inner face of said outer housing (10).

Claim 19 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10) centered on a first axis A,

at least one combustion chamber provided in said housing having a charge of solid propellant in the combustion chamber, and

at least one igniter unit generating ignition gas for igniting said solid propellant and having an igniter (54) integrated within said igniter unit (16,18),

said igniter unit being arranged on said outer housing (10) between opposite ends of said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10), said igniter unit being centered on a second axis which extends radially relative to the first axis, and a first radial ignition transfer opening being provided in said outer housing, said first radial igniter transfer opening directing gas flow radially, said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant, flowing via said first ignition transfer opening into one of a distribution space (40) or an intermediate space (80) arranged outside of said igniter unit (16, 18) and in an interior of said outer housing (10), said one of a distribution space (40) and an intermediate space (80) being free of propellant and defined by an inner face of said outer housing (10) and a wall (32, 72).



Claim 20 (Previously Presented) The gas generator according to claim 19, wherein a second ignition transfer opening (58) is provided in said igniter unit (16) in a region of the fastening of said igniter unit (16) to said outer housing.

Claim 21 (Previously Presented) The gas generator according to claim 19, wherein said igniter unit (16, 18) does not project into said combustion chamber (26, 28).

Claim 22 (Withdrawn) The gas generator according to claim 19, wherein said combustion chamber (26, 28) has an axially arranged filling opening.

Claim 23 (Previously Presented) The gas generator according to claim 19, wherein said combustion chamber (26, 28) is constructed without an undercut.

Claim 24 (Previously Presented) The gas generator according to claim 19, wherein said combustion chamber (26, 28) is cylindrical and has a longitudinal direction running parallel to a central axis (A) of said outer housing (10).

Claim 25 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10) centered on a first axis A,

at least one combustion chamber provided in said housing having a charge of solid propellant in the combustion chamber, and

at least one igniter unit generating ignition gas for igniting said solid propellant and having an igniter (54) integrated within said igniter unit (16,18),

said igniter unit being arranged on said outer housing (10) between opposite ends of said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10), said igniter unit being centered on a second axis which extends radially relative to the first axis, and a first radial ignition transfer opening being provided in said outer housing, said first radial igniter transfer opening directing gas flow radially, said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant, flowing via said first ignition transfer opening into one of a distribution space (40) or an intermediate space (80) arranged outside of said igniter unit (16, 18) and in an interior of said outer housing (10), said one of a distribution space (40) and an intermediate space (80) defined by an inner face of said outer housing (10) and a wall (32, 72), wherein said combustion chamber is defined by a combustion chamber wall (32) and wherein between an inner face of said outer housing (10) and said combustion chamber wall (32) said distribution space (40) is provided for ignition gas produced by said igniter unit (16, 18), said first ignition transfer opening (50) opening into said space (40).

Claim 26 (Previously Presented) The gas generator according to claim 25, wherein said distribution space (40) extends across an entire axial length of said combustion chamber (26).

Claim 27 (Previously Presented) The gas generator according to claim 26, wherein said outer housing (10) has outflow openings (44) and an expansion space (42) for gas is provided between said combustion chamber (26, 28) and said outflow openings (44).

Claim 28 (Previously Presented) The gas generator according to claim 27, wherein said expansion space (42) extends across said entire axial length of said combustion chamber (26, 28).

Claim 29 (Previously Presented) The gas generator according to claim 25, wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said distribution space (40).

Claim 30 (Previously Presented) The gas generator according to claim 27, wherein said combustion chamber wall (32) is formed by an insert which has a radially inwardly directed indentation to produce said expansion space (42).

Claim 31 (Canceled)

Claim 32 (Previously Presented) The gas generator according to claim 30, wherein except for said distribution space (40) and said expansion space (42), said insert lies with an entire surface against said inner face of said outer housing (10).

Claim 33 (Previously Presented) The gas generator according to claim 19, wherein said outer housing has outflow openings (44) which are arranged in a region lying diametrically opposite said first ignition transfer opening (50), as seen relative to said first axis A of said outer housing (10).

Claim 34 (Previously Presented) A gas generator comprising an elongated, tubular outer housing (10),

at least one combustion chamber (26, 28) provided therein and filled with a solid propellant (30; 30'),

and at least one igniter unit (16, 18) generating ignition gas for igniting said solid propellant (30; 30') and having an igniter (54) integrated within said igniter unit (16,18),

said igniter unit (16, 18) being arranged radially and externally on said outer housing (10) and said igniter (54) being positioned completely outside of said outer housing (10) and a, with respect to said outer housing (10), first radial ignition transfer opening (50) being provided in said outer housing (10), said ignition gas generated in said igniter unit (16, 18), before reaching said solid propellant

(30; 30'), flowing via said first ignition transfer opening (50) into one of a distribution space (40) and an intermediate space (80) arranged outside of said igniter unit (16, 18) and into an interior of said outer housing (10), said one of a distribution space (40) and an intermediate space (80) defined by an inner face of said outer housing (10) and a wall (32), said wall (32) lying opposite and facing said first ignition transfer opening (50).

Serial No. 10/650,237

CLAIM FOR PRIORITY:

Attached to the present amendment is a certified copy of an English translation of German patent application No. 102 40 639.1 filed September 3, 2002 with the German Patent and Trademark Office. Applicant respectfully requests priority of the attached German patent application in the present U.S. application.

Attachment: Certified copy of an English translation of German patent application No. 102 40 639.1 filed September 3, 2002 with German Patent and Trademark Office.

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